In the Claims:

Please add new Claims 68-106 as indicated below. Substitute pages containing all pending claims are attached, and the entry of these pages is requested.

68. A therapeutic antibody that specifically binds an epitope contained within positions 10-25 of Aβ.

69. A therapeutic antibody that sequesters Aβ peptide from its bound, circulating form in blood, and alters clearance of soluble and bound forms of Aβ in central nervous system and plasma.

70. A therapeutic antibody that sequesters free β-amyloid in the blood and impedes passage of soluble β-amyloid out of the peripheral circulation.

71. A therapeutic antibody that sequesters free β-amyloid in the blood, reduces levels of β-amyloid in the brain of an animal and prevents formation of amyloid plaques in the brain of the animal.

72. The therapeutic antibody of claims 68-71 that is a whole antibody.

73. The therapeutic antibody of claims 68-71 that is a fragment.

74. The therapeutic antibody of claims 68-71 that specifically binds to an epitope having an amino acid between positions 10 and 25 of Aβ.

75. The therapeutic antibody of claim 68-71 that specifically binds to an epitope having an amino acid between positions 14 and 25 of Aβ.

76. The therapeutic antibody of claim 68, which specifically binds an epitope contained in positions 14-25 of said Aβ peptide.

77. The therapeutic antibody of claims 68-71, which is a single chain antibody.

78. An antibody fragment obtained from the therapeutic antibody of any one of claims 68-77.

B' cont.

79. The fragment of claim 78, which is a Fab or F(ab')2 fragment.

80. The fragment of claim 79, which is an F(ab')2 fragment.

81. The fragment of claim 79, which is an Fab fragment.

82. The therapeutic antibody or fragment of any one of claims 68-77, wherein the antibody or fragment thereof is produced in a myeloma cell.

83. The therapeutic antibody or fragment of any one of claims 68-82, which, when administered peripherally to

a human subject, does not need to cross the subject's blood-brain barrier to exert its beneficial effects.

84. The therapeutic antibody or fragment of any one of claims 68-82, which, when administered peripherally to a human subject, does not require cellular responses in the subject's brain to exert its beneficial effects.

85. The therapeutic antibody or fragment of any one of claims 68-82, which, when administered peripherally to a human subject, does not substantially bind aggregated Aβ in the subject's brain.

86. The therapeutic antibody or fragment of any one of claims 68-82, which, when administered peripherally to a human subject, exhibits beneficial effects without necessarily binding to Aβ plaques in the brain.

B1 Cont.

87. A nucleic acid, comprising a sequence coding for the light chain or the heavy chain of the antibody of any one of claims 68-86, or a fragment thereof.

88. One or more nucleic acids, which when expressed in a suitable host cell, yield an antibody of any one of claims 68-86.

89. An expression vector for expressing the antibody or fragment of any one of claims 68-86 comprising nucleotide sequences encoding said antibody or fragment.

90. A cell transfected with the expression vector of claim 89.

91. A cell transfected with two expression vectors of claim 89, wherein a first vector comprises a nucleotide sequence encoding a light chain and a second vector comprises a nucleotide sequence encoding a heavy chain.

92. A recombinant cell that produces the therapeutic antibody or fragment of any one of claims 68-82.

93. The cell of any one of claims 90-92, wherein the cell is a myeloma cell.

94. A composition that comprises the antibody or fragment of any one of claims 68-86, and a sterile diluent.

95. A method to inhibit the formation of amyloid plaques or the effects of toxic soluble Aβ species in humans, which method comprises administering to a human subject in need of such inhibition an effective amount of a therapeutic antibody or fragment thereof that specifically immunoreacts with an epitope contained in positions 10-25 of Aβ.

B1 Cont.

96. A method to reduce amyloid plaques or the effects of toxic soluble Aβ species in humans, which method comprises administering to a human subject in need of such reduction an effective amount of a therapeutic antibody or fragment thereof which specifically immunoreacts with an epitope contained in positions 10-

25 of Aβ.

97. A method to inhibit the formation of amyloid plaques or the effects of toxic soluble Aβ species in humans, which method comprises administering to a human subject in need of such inhibition an effective amount of a therapeutic antibody or fragment thereof that sequesters Aβ peptide from its bound, circulating form in blood.

98. A method to reduce amyloid plaques or the effects of toxic soluble Aβ species in humans, which method comprises administering to a human subject in need of such reduction an effective amount of a therapeutic antibody or fragment thereof which sequesters Aβ peptide from its bound, circulating form in blood.

99. The method of any of claims 95-98, wherein said antibody or fragment, when administered peripherally to humans, does not need to cross the blood-brain barrier to inhibit the formation of amyloid plaques or the effects of toxic soluble Aβ species.

100. The method of any of claims 95-98, wherein said antibody or fragment, when administered peripherally to humans, does not require cellular responses to inhibit the formation of amyloid plaques or the effects of toxic soluble Aβ species.

101. The method of any of claims 95-98, wherein said antibody or fragment, when administered peripherally to